

Amendments In the Claims

Please cancel Claims 7, 12, 27-29 and 32-33. Please amend Claims 1-6, 8, 11, 13, 17-19 and 22-26 as follows:

1. (Currently Amended) A method comprising:
 receiving input data comprising a plurality of integration objects, wherein
including a hierarchy of instances of object components; and
the plurality of integration objects are hierarchically related,
each of the plurality of integration objects comprises information,
the plurality of integration objects comprises a first and second
integration object, and
the second integration object is a child object of the first integration
object; and
~~modifying performing~~ a database ~~modification process~~ in response to the input
 data, the modifying the database modification process comprising
comparing finding a first database record matching with the first
integration object ~~a higher-level component instance within the~~
~~hierarchy,~~
modifying updating the first matching database record using the
information associated with the first integration object, if the
first database record matches information associated with the
first integration object ~~based on the higher-level component~~
~~instance,~~
 finding one or more ~~a set of~~ child database records associated with the
first database record ~~higher-level component instance,~~
modifying one or more of the updating the set of child database records
using the information associated with the second integration
object, if the second integration object comprises a record
matching a corresponding record in the one of the one or more
child database records ~~based on a first set of lower-level~~
~~component instances within the hierarchy, each instance in the~~

~~first set of lower level component instances having a matching record in the set of child database records, and~~
 inserting a new database record[[s]] comprising the information associated with the second integration object, if the second integration object does not comprise a record matching a corresponding record in one of the one or more child database records, wherein ~~based on a second set of lower level component instances, the instances in the second set of lower level component instances not having matching records in the set of child database records.~~
the one or more child database records comprises the new database record.

2. (Currently Amended) The method of claim 1, wherein the database modification process further comprises:

deleting a record[[s]] from the one or more set of child database records, if the record[[s]] does deleted not have a having matching integration object component instances in the hierarchy.

3. (Currently Amended) The method of claim 1, wherein finding the first database record matching the first integration object ~~higher level component instance~~ comprises:

extracting a ~~set of~~ userkey[[s]] related to an object type of the first integration object ~~higher level component instance~~;

utilizing the ~~set of~~ userkey[[s]] to find the first matching database record.

4. (Currently Amended) The method of claim 3 wherein:
 the finding comprises includes utilizing SQL queries directed to the database.

5. (Currently Amended) The method of claim 2 wherein:
 the deleting further comprises includes cascaded deleting.

6. (Currently Amended) A method comprising:

receiving input data comprising a plurality of integration objects, wherein
~~including an external hierarchy of instances of object components;~~
~~and~~
the plurality of integration objects are hierarchically related,
each of the plurality of integration objects comprises components,
the plurality of integration objects comprises a first and second
integration object, and
the second integration object is a child object of the first integration
object; and

modifying the plurality of integration objects using a database, said
~~modifying performing a modification process for a local group of~~
~~instances of object components in response to the input data, the~~
~~modification process comprising~~
comparing finding a first database record with the first integration
object, in the local group, a local instance matching a higher-
level external instance within the external hierarchy,
~~updating the local instance based on the higher-level external~~
~~instance,~~
modifying the first integration object using data from the first
database record, if the first database record matches
information associated with the first integration object,
~~finding one or more a set of child~~ database records associated with the
first database record ~~local instances associated with the higher-~~
~~level external instance,~~
~~updating the set of child local instances based on a first set of lower-~~
~~level external instances within the external hierarchy, the~~
~~external instances in the first set having matching child local~~
~~instances, and~~
modifying the second integration object using data from one of the
one or more child database records, if the second integration

object comprises a record matching a corresponding record in the one of the one or more child database records, and inserting a new integration object comprising data from one of the one or more child database records, if the one of the one or more child database records does not comprise a record matching a corresponding record in the second integration object, wherein new local instances into the local group based on a second set of lower-level external instances, the external instances in the second set not having matching local instances in the set of child local instances.
the new integration object is a child of the first integration object.

7. Canceled.

8. (Currently Amended) The method of claim 6 [[,]] wherein the finding the first database record matching the first integration object , in the local group, the local instance matching the higher-level external instance comprises:

extracting a ~~set of~~ userkey[[s]] related to an object type of the first integration object higher-level external instance; and
 utilizing the ~~set of~~ userkey[[s]] to find the first database record matching local instance.

9-10. Canceled.

11. (Currently Amended) An apparatus comprising:
 means for receiving input data comprising a plurality of integration objects, wherein including an external hierarchy of instances of object components; and
the plurality of integration objects are hierarchically related,
each of the plurality of integration objects comprises components,
the plurality of integration objects comprises a first and second integration object, and

the second integration object is a child object of the first integration object; and

means for modifying the plurality of integration objects using a database, the

~~modifying performing a modification process for a local group of instances of object components in response to the input data, the means for performing the modification process~~ comprising

means for comparing finding a first database record with the first integration object, in the local group, a local instance matching a higher-level external instance within the external hierarchy,
~~means for updating the local instance based on the higher-level external instance,~~

means for modifying the first integration object using data from the first database record, if the first database record matches information associated with the first integration object,

means for finding one or more a set of child database records associated with the first database record local instances
~~associated with the higher-level external instance,~~

~~means for updating the set of child local instances based on a first set of lower-level external instances within the external hierarchy, the external instances in the first set having matching child local instances, and~~

means for modifying the second integration object using data from one of the one or more child database records, if the second integration object comprises a record matching a corresponding record in the one of the one or more child database records, and

means for inserting a new integration object comprising data from one of the one or more child database records, if the one of the one or more child database records does not comprise a record matching a corresponding record in the second integration object, wherein new local instances into the local group based on a second set of lower-level external instances, the external

~~instances in the second set not having matching local instances
in the set of child local instances.~~

the new integration object is a child of the first integration
object.

12. Canceled.

13. (Currently Amended) The apparatus of claim 11 wherein the means for finding the first database record matching the first integration object, ~~in the local group, the local instance matching the higher-level external instance~~ comprises:

means for extracting a ~~set of~~ userkey[[s]] related to an object type of the first integration object higher-level external instance; and
means for utilizing the ~~set of~~ userkey[[s]] to find the first database record matching local instance.

14-16. Canceled.

17. (Currently Amended) A machine-readable medium embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, the method comprising:

receiving input data comprising a plurality of integration objects, wherein including a hierarchy of instances of object components; and the plurality of integration objects are hierarchically related, each of the plurality of integration objects comprises information, the plurality of integration objects comprises a first and second integration object, and the second integration object is a child object of the first integration object; and
modifying performing a database ~~modification process~~ in response to the input data, the modifying the database modification process comprising comparing finding a first database record matching with the first integration object a higher-level component instance within the hierarchy,

~~modifying updating the first matching database record using the information associated with the first integration object, if the first database record matches information associated with the first integration object based on the higher-level component instance,~~
 finding one or more ~~a set of~~ child database records associated with the first database record higher-level component instance,
~~modifying one or more of the updating the set of~~ child database records using the information associated with the second integration object, if the second integration object comprises a record matching a corresponding record in the one of the one or more child database records based on a first set of lower-level component instances within the hierarchy, each instance in the first set of lower-level component instances having a matching record in the set of child database records, and
 inserting a new database record[[s]] comprising the information associated with the second integration object, if the second integration object does not comprise a record matching a corresponding record in one of the one or more child database records, wherein based on a second set of lower-level component instances, the instances in the second set of lower-level component instances not having matching records in the set of child database records.
the one or more child database records comprises the new database record.

18. (Currently Amended) The machine readable medium of claim 17 [[27]], further embodying instructions, which, when executed by the processor, cause the processor to perform the method, wherein the database modification process further comprises:

deleting a record[[s]] from the one or more set of child database records, if the record[[s]] does deleted not have a having matching integration object component instances in the hierarchy.

19. (Currently Amended) The machine readable medium of claim 17 ~~[[27]]~~, further embodying instructions, which, when executed by the processor, cause the processor to perform the method wherein finding the first database record matching the first integration object higher-level component instance comprises:

extracting a ~~set of~~ userkey[[s]] related to an object type of the first integration object higher-level component instance;
utilizing the ~~set of~~ userkey[[s]] to find the first matching database record.

20. (Previously Presented) The machine readable medium of claim 19, further embodying instructions, which, when executed by the processor, cause the processor to perform the method wherein:

the finding includes utilizing SQL queries directed to the database.

21. (Previously Presented) The machine readable medium of claim 20, further embodying instructions, which, when executed by the processor, cause the processor to perform the method wherein:

the deleting further includes cascaded deleting.

22. (Currently Amended) A system comprising:

~~a processor;~~

a memory ~~coupled to the processor;~~

an interface, coupled to the memory, ~~processor; wherein the processor is~~
configured to receive input data comprising a plurality of integration objects including a hierarchy of instances of object components, wherein
the plurality of integration objects are hierarchically related,
each of the plurality of integration objects comprises components,
the plurality of integration objects comprises a first and second
integration object, and
the second integration object is a child object of the first integration object; and

a processor, coupled to the interface, and configured to modify perform a
database ~~modification process~~ in response to the input data, ~~the database~~

~~modification process is performed by, wherein to modify the database~~
the processor is further configured to
~~compare~~ find a first database record matching with the first integration
~~object a higher-level component instance within the hierarchy,~~
~~modify~~ update the first matching database record using the information
associated with the first integration object, if the first database
record matches information associated with the first
integration object based on the higher-level component
instance,
find one or more ~~a set of~~ child database records associated with the first
database record higher-level component instance,
~~modify one or more of the~~ update the set of child database records
using the information associated with the second integration
object, if the second integration object comprises a record
matching a corresponding record in the one of the one or more
child database records based on a first set of lower-level
~~component instances within the hierarchy, each instance in the~~
~~first set of lower-level component instances having a matching~~
~~record in the set of child database records, and~~
insert a new database record[[s]] comprising the information associated
with the second integration object, if the second integration
object does not comprise a record matching a corresponding
record in one of the one or more child database records,
~~wherein based on a second set of lower-level component~~
~~instances, the instances in the second set of lower-level~~
~~component instances not having matching records in the set of~~
~~child database records.~~
the one or more child database records comprises the new
database record.

23. (Currently Amended) The system of claim 22 wherein ~~the processor~~
further to modify the database, the processor is further configured to perform the
~~database modification process to~~

delete a record[[s]] from the one or more ~~set of~~ child database records, if the record[[s]] ~~does deleted~~ not have a ~~having~~ matching integration object component instances in the hierarchy; ~~and~~.

24. (Currently Amended) The system of claim 22 wherein ~~the processor is~~ to find the first database record matching the first integration object, the processor is further configured to higher-level component instance by extract[[ing]] a ~~set of~~ userkey[[s]] related to an object type of the first integration object higher-level component instance, and utilize ~~utilizing~~ the ~~set of~~ userkey[[s]] to find the first ~~matching~~ database record.

25. (Currently Amended) The system of claim 24 wherein to find the database records, the processor is further configured to: ~~the processor to~~ utilize SQL queries directed to the database ~~for the find~~.

26. (Currently Amended) The system of claim 23 ~~[[22]]~~ wherein to delete the record, the processor is further configured to: ~~the processor to~~ cascade delete ~~for the delete~~.

27-33. Canceled.